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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,665	12/06/2001	Yasuhisa Fujii	15162/04070	8688
24367	7590	01/13/2004	EXAMINER	
SIDLEY AUSTIN BROWN & WOOD LLP			RODRIGUEZ, JOSEPH C	
717 NORTH HARWOOD				
SUITE 3400			ART UNIT	
DALLAS, TX 75201			PAPER NUMBER	
			3653	

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/010,665

Applicant(s)

FUJII ET AL.

Examiner

Joseph C Rodriguez

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 14-23 and 30-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/27/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of claims 1-13 and 24-29 in Paper No. 7 is acknowledged.

Claims 14-23 and 30-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 25, the language "can be" in renders the claims indefinite as it is unclear whether the features subsequent to the "can be" language are a necessary part of the claimed invention. Applicant must positively recite the features of the claimed invention. Examiner thus recommends eliminating all instances of "can be" from the claim language.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 and 24-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown (US 2002/0164820 A1).

Regarding claims 1-8 and 24-27, Brown teaches a method and apparatus (Fig. 5) comprising a microchip (134), a flow pass (156), a particle capture unit (146, 154) and a deflecting mechanism (144, 152), wherein said particles are captured on said capture units and “can be” released from said microchip (para. 131 et seq.). Here, both surfaces of the flow pass can be regarded as deflecting mechanisms, or deflecting sides, as Brown teaches that both surfaces can be constructed of hydrophobic material (Id.).

Regarding claims 9-10, Brown also expressly teaches the use of electromagnetic means in a repelling (i.e., deflecting) surface to assist in capturing particles (para. 41-46, 135). Applicant is also respectfully reminded that the material or article worked upon (i.e., magnetic particles) by the apparatus does not limit apparatus claims. See MPEP 2115.

Claims 1, 3-5 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Austin et al. ("Austin") (US' 115).

Austin teaches an apparatus (Fig. 1, 2, 5c) comprising a microchip (22), a flow pass (40 to 42) with electrode propulsion/deflecting means (40, 42, 44) and a particle capturing unit (28). Here, the projection (28) is regarded as protruding into only a portion of said flow pass cross section as another structure (60) separates protruding columns (28) from the top surface of the microchip.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Austin and Fodor et al. ("Fodor")(US '957).

Brown as set forth above teaches all that is claimed except for expressly teaching a dual electrode propulsion structure or micropump. Austin, however, teaches a flow pass with electrode propulsion means in a microchip capture unit (Fig. 1, near 40, 42, 44). Moreover, the electrode system provides the common-sense benefit of ensuring the proper flow of particles through a flow pass. Further, the micropump (Fodor, Fig. 8a, pump 116) is a well-known functional equivalent to the electrode system in a microchip. Therefore, it would have been obvious at the time the invention was

made to a person having ordinary skill in the art to modify the invention of Brown as taught above to ensure the proper flow of particles through a micro-assembly.

### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is **703-308-8342**. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).


The **UnOfficial** fax phone number for the organization where this application or proceeding is assigned is **703-306-2571** or **703-308-6552**.

The examiner's **UNOFFICIAL Personal fax number** is **703-746-3678**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **703-308-1113**.

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January 6, 2004

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600